

APR 23 2001

**EXPEDITED PROCEDURE - EXAMINING GROUP 2879**

**S/N 09/145,595**

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

|             |  |                 |                |
|-------------|--|-----------------|----------------|
| Applicant:  | Ji Ung Lee   | Examiner:       | Karabi Guharay |
| Serial No.: | 09/145,595   | Group Art Unit: | 2879           |
| Filed:      | September 2, 1998  | Docket:         | 303.537US1     |
| Title:      | FIELD EMISSION DEVICES HAVING STRUCTURE FOR REDUCED<br>EMITTER TIP TO GATE SPACING |                 |                |

**AMENDMENT & RESPONSE UNDER 37 C.F.R. § 1.116**

Box AF  
Commissioner for Patents  
Washington, D.C. 20231

In response to the Final Office Action mailed February 22, 2001, please amend the application as follows:

**IN THE CLAIMS**

Please add the following new claims:

47. (New) A field emitter array, comprising:
- a number of cathodes in rows along a substrate;
  - a gate insulator located along the substrate and surrounding the cathodes, the gate insulator having a gate line region thickness;
  - a number of gate lines coupled to the gate insulator, wherein a gate to cathode distance between a portion of the gate line and the cathode is substantially thinner than the gate line region thickness ; and
  - a number of anodes located in columns orthogonal to and opposing the rows of cathodes.

48. (New) The field emitter array of claim 47, wherein the number of cathodes include polysilicon cones.

49. (New) The field emitter array of claim 47, wherein the number of gate lines include refractory metals.

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